Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (original) A system, comprising:

a first master device;

a second master device;

a redundancy manager coupled to the first and second master devices; and

a slave device coupled to the redundancy manager,

wherein the redundancy manager is operable to receive a first data stream from the first master device and a second data stream from the second master device, and

wherein the redundancy manager is operable to selectively forward one of the first and second data streams to the slave device according to a prioritization of factors calculated to optimize an amount of valid communication to the slave device.

2. (original) The system of claim 1 wherein the first and second master devices comprise computers that are not configured to share data associated with the slave device directly with each other.

3. (original) The system of claim 1 wherein the first and second master devices are in different locations such that a user having access to the first master device is not able to simultaneously access the second master device and vice versa.

4. (original) The system of claim 1 wherein the slave device comprises a subsea tool.

5. (original) The system of claim 1 wherein the factors calculated to optimize an amount of valid communication to the slave device comprise a validity estimation of the first data stream, a validity estimation of the second data stream, mastership transfer commands from the first and second master devices, and timing considerations.

6. (original) The system of claim 5 wherein the first and second master devices are configured to send the mastership transfer commands to the redundancy manager in response to user intervention and

at least one of data content received from the slave data and a lack of data received from the slave device.

7. (original) The system of claim 5 wherein the timing considerations prevent switching back and forth between forwarding the first data stream and the second data stream if less than a threshold amount of time has passed.

8. (original) The system of claim 1 further comprising a second redundancy manager coupled to the first master device, the second master device and the slave device, wherein the second redundancy manager is operable to receive the first and second data streams and forward one of the first and second data streams to the slave device via a second communication path that is separate from a first communication path used to transmit data from the first redundancy manager to the slave device.

9. (original) The system of claim 8 wherein the slave device comprises a redundant subsea tool that is configured to receive data from both the first communication path and the second communication path, wherein the redundant subsea tool comprises redundant sensors and redundant controllers and wherein each sensor and controller is operable to perform a function according to data received from at least one of the first and second communication paths.

10. (original) A redundancy manager device for providing redundant data communication to a slave device, the redundancy manager device comprising:

        a first processor; and

        a switching mechanism coupled to the first processor,

wherein the switching mechanism is configured to receive a first data stream associated with a first master device and a second data stream associated with a second master device,

wherein the switching mechanism is configured to implement a default configuration whereby one of the first and second data streams is forwarded to the slave device,

wherein the first processor is configured to provide a switch control signal that causes the switching mechanism to switch between forwarding the first data stream and forwarding the second data stream,

wherein the first processor asserts and de-asserts the switch control signal in response to a determination of first and second data stream validity, mastership transfer commands associated with

the first and second master devices, and timing considerations.

11. (original) The redundancy manager device of claim 10 further comprising a second processor, wherein the second processor is configured to determine the second data stream validity and assert a health signal to the first processor when the second data stream is invalid.

12. (original) The redundancy manager device of claim 11 wherein the second processor is further configured to assert a first mastership transfer signal to the first processor in response to a mastership transfer command associated with transferring mastership from the first master device to the second master device.

13. (original) The redundancy manager device of claim 12 wherein the second processor is further configured to assert a second mastership transfer signal to the first processor in response to a mastership transfer command associated with transferring mastership from the second master device to the first master device.

14. (original) The redundancy manager device of claim 13 wherein the first processor is configured to determine if the first data stream is invalid and to periodically determine an assertion state of the health signal, first mastership transfer signal, and the second mastership transfer signal.

15. (original) The redundancy manager device of claim 14 wherein the first processor is configured to periodically assert a reset signal to the second processor whereby the second processor resets the health signal, the first mastership transfer signal, and the second mastership transfer signal.

16. (original) The redundancy manager device of claim 15 wherein the first processor controls the switch control signal according to a prioritization of the first data stream validity, the health signal, the first mastership transfer signal, the second mastership transfer signal, and an amount of time since the switching mechanism last switched.

17. (original) The redundancy manager device of claim 16 further comprising monitoring units having indicators associated with a health determination of the first master device, a health determination of the second master device, a health determination of the first processor, a health

determination of the second processor, a forwarding of the first data stream, a forwarding of the second data stream, and the switch control signal.

18. (original) A method, comprising:

receiving a plurality of data streams; and

forwarding one of the data streams according to a prioritization of data stream validity, requests to forward a particular data stream, and an amount of time that has passed since a different data stream has been forwarded.

19. (original) The method of claim 18 further comprising cycling between forwarding the data streams if a determination is made that none of the data streams are valid.

20. (original) The method of claim 19 further comprising detecting when a data stream becomes valid and setting a relay to forward the valid data stream.

21. (original) The method of claim 20 further comprising upon receiving a request to forward a particular data stream determining if the particular data stream is associated with a healthy master device.

22. (cancelled)

23. (cancelled)

24. (original) A system, comprising:

a first master device;

a second master device;

a slave device responsive to commands received from the first and second master devices;

means for switching mastership of the slave device coupled between the master devices and the slave device; and

means for controlling coupled to the means for switching mastership, wherein the means for controlling asserts and de-asserts a signal to control the means for switching mastership based on a prioritization of factors calculated to optimize an amount of valid

communication to the slave device.

25. (original) The system of claim 24 wherein the factors calculated to optimize an amount of valid communication to the slave device comprise a validity estimation of the data streams from the first and second master devices, requests to transfer mastership by the first and second master devices, and timing considerations.

26. (original) The system of claim 24 wherein the first and second master devices are configured to send requests to transfer mastership in response to user input and at least one of data content received from the slave data and a lack of data received from the slave device.

27. (original) The system of claim 24 wherein the timing considerations prevent the means for switching mastership from switching back and forth if less than a threshold amount of time has passed